Order-No.: DD+DIS139.98E

1 Piece Q6K7S MA1

November 98

ADC COMPACT

Type 5145

Modification instruction

Please file this document in section 10
of the Technical Documentation ADC COMPACT

Upgrade from DIPS1.0.03 DIPS1.0.05

List of contents

1. General information 2
1.1. Software prerequisites 2
1.2. Hardware prerequisites 2
1.3. Required time for the Upgrade 2
1.4. Order No.: EB+44060640 2
1.5. Additional hardware requirements 2
2. Upgrade 3
2.1. Preparing actions 3
2.2. Upgrade procedure 4
2.3. Installation of the Language files 6
2.4. Finish upgrade 6
3. Solved Problems with DIPS1.0.05 7
4. What's new in DIPS1.0.05 8
5. Functions, which will be implemented and supported in one of the next software versions 8
6. Known bugs not solved yet (DIPS 1.0.05) 9

printed in Germany

1. General information

1.1. Software prerequisites

	DIGITIZER:	**≥ COP_1111**
	PRID	**≥ PRID1.1.05**

1.2. Hardware prerequisites

Experiences have shown, that 128 MB RAM is the absolute minimum for the (V)DIPS. However for a good performance (UI speed, UI stability) 192 MB RAM memory is recommended.

1.3. Required time for the Upgrade

The upgrade itself takes about 90 minutes. During the upgrade also the images from the System Disk are saved to tape and restored from there. It takes about 25 minutes / 100 images to save to tape and get them from there (calculated with an average images size of 5.9Mb).

Example for a 2.1GB system disk:
90 min for mere upgrade + 100min for 200 images = 190min = 3hours 10min

Example for a 4.2GB system disk:
90 min for mere upgrade + 260 min for 540 images = 350min = 5hours 50min

Reduce the upgrade time as far as possible. So if possible remove all the images (also OFLS) the customer does not need anymore on the (V)DIPS.

1.4. Order No.: EB+44060640

Contents of delivery Software Kit DIPS1.0.05

- 1 CD ROM: MIMOSA DIPS 1.0.05
- 1 Floppy disk Upgrade Support floppy
- 1 Floppy disk Language disk LNG1.0.05 for the (V)DIPS Software ≥ 1.0.03
- 1 Documentation Upgrade procedure
- 1 Floppy disk empty disk, necessary for the upgrade procedure
- 2 DAT-Tapes necessary to save stored images from the system disk

1.5. Additional hardware requirements

- cleaning tape
- DAT Tape necessary if Offline images have to be stored

2. Upgrade

2.1. Preparing actions

1) Insert cleaning tape and wait until it is ejected
2) Remove no more needed images from the (V)DIPS

   The backup of the images can take very long (approx 25min/100images). If possible remove all the images the customer does not need anymore on the PS
3) Make sure, that the waste is empty.
   Click on **<Controller button>**, select **<System monitoring>**, click on **<HDisk>**, click on **<Waste>** and empty the bin.
4) Save stored "Offline images", if still needed. If not, skip this point.
   - go to **<Maintenance>**
   - `Enter selection:` type **3** to select **Repair**
   - `Enter selection:` type **6** to select **ImportExport**
   - `Enter selection:` type **4** to select **DirList.** Check if OFL images are stored.
   - If OFL images have to be stored, insert an empty tape into the Tape drive.
   - `Enter selection:` type **5** to select **save.**

     Time to save: 30 minutes / 100 OFL images
   - `Enter selection:` type **q** to exit this menu.
5) Write down the **current hostname, current ip-address** and **Netmask** (if needed) of the (V)DIPS. These names are needed during the Software installation.
   - go to **<Maintenance>**
   - `Enter selection:` type **3** to select **Repair**
   - `Enter selection:` type **4** to select **System info**
   - write down the Hostname of the workstation (e.g. "vips220"),
   - write down the IP address of the workstation (e.g. "192.9.200.220")
   - write down the Netmask of the workstation, if it is used
   - `Enter selection:` type **q** to exit this menu.
6) Insert the "UPGRADE SUPPORT floppy"
7) Go to **<Maintenance>**
8) `Enter selection:` type **4** to select **Tools**
9) `Enter selection:` type **7** to select **FloppyDir** to mount the floppy
10) `Enter selection:` type **1** to select **Terminal**
11) `1.....:` enter **/floppy/floppy0/install.csh** , hit **<return>**
12) `OK to continue:` type **yes**
13) type **eject floppy** and hit **<return>**
14) type **exit** `and hit` **<return>** to close this window.
15) `Enter selection:` type **q** to exit this menu

2.2. Upgrade procedure

1) Go to **<Maintenance>**
2) `Enter selection:` type **2** to select **Install**
3) `Enter selection:` type **2** to select **Software**
4) `Enter selection:` type **3** to select **Upgrade**
5) If question „`Remove all OFL-files`“ appears answer it with **yes**
6) Insert empty DAT-tape into tape drive.
7) `Take a System backup on Tape now [yes, no, skip, ?, q]:` type **yes**

This can take very long (approx. 25min/100images) e.g. for a 2GB system disk 90min, for a 4GB system disk 180min. Only the images from the system disk will be put on tape. As the additional disks are not touched the images there do not have to be saved to the tape.

8) `Ok to continue [yes, no, ?, q]: type` **yes**
9) `SaveArea backup on floppy or tape [floppy, tape, ?, q]:` type **f**

Don’t select “TAPE”

10) `put floppy into drive and hit <return>:` hit **<return>.**
    ☞ Use an empty floppy!
11) Insert CDROM 1.0.05
12) `Ok to reboot from cdrom [yes, no, ?, q]: type` **yes**
13) `Mount bootable CDROM and hit <return>:` hit **<return>**

Booting takes about 5 minutes

14) `Enter a main selection:` type **1** to select **Install** and hit **<return>**
15) `Enter a selection:` type **2** to select **upgrade** and hit **<return>**
16) If the floppy is still in the drive answer the question „`Use the floppy as JumpStart floppy [yes, no, ?, q]:`“ with **no**.
17) `Install O.S. software from ./SYSTEM/SUN0500 [yes,no,?,q]: type` **yes** (=> the Solaris installation program starts)
18) `"The Solaris Installation Program"` window appears. Click **<Continue>**
19) `"Identify This System"` window appears. Click **<Continue>**
20) `"Hostname"` window appears. **Enter the old hostname** and click **<Continue>**
21) `"Network Connectivity"` window appears. Click on **<yes>** and **<Continue>**
22) ☞ The following window appears only with ULTRA SPARC 1, if fast ethernet is installed. Here you can select **hme0 = 100 mB** autosensing or **le0 = 10 mB** onboard. We recommend to select **hme0**.

    `"Primary Network Interface”` window. Click on **hme0** and **<continue>.**
23) `"IP Address"` window appears. **Enter the old ip_address** and click **<Continue>**
24) `"Confirm information"` window appears. Check. If correct confirm by clicking **<Continue>.**

25) "Subnets" window appears. Click on **<no>** or if used click on **<yes>** and then **enter the subnetmask**. Click **<Continue>.**

26) "Time Zone" window appears. Click on **<Geographic region>** and **<set>**.

27) "Geographic region" window appears. Select local **<Region>** and **<Time zone>** and click **<continue>.**

28) "Date and Time" window appears. Modify **<Date>** and **<Time>** if not correct. Click **<Continue>.**

29) "Confirm information" window appears. Check. If correct confirm by clicking **<Continue>.**

System identification is completed.

Now the Solaris installation program starts.
After about 15 minutes the Workstation will be rebooted automatically, then the following screen appears:

Please log on as root and enter: /mimosa.install

30) Hit <return> to continue..... hit **<return>**

31) PS5000 console login: type **root**

32) Password:..... **type in the root password**
Note: if you don't know the SU password, please contact MED CSO!

33) **#** type **/mimosa.install**

34) OK to run with option upgrade[yes, no, ?, q]: type **yes**

35) Insert backup tape and wait until the green light stops flashing (if not already in).

36) Restore directory /images from tape [yes, no, ?, q]: type **yes**

The restore of the images from the former backup takes about 25min/ 100 images.

37) Install SW from ./MIMOSA/VIPS100x [yes, no, ?, q]: type **yes**

38) Insert floppy with Save Area backup.

39) Choose a SaveArea [?, ??, q]: type **2** to select **floppy.**

Don't select "TAPE"

After about 20 minutes

40) Ok to reboot: type **yes**
User interface starts

41) If images don't appear start a **<check system>** via the controller button in the Userinterface.

42) **Eject the tape and the floppy**

2.3. Installation of the Language files

With this upgrade the language files are not saved.
You have to install the language files again.

Installation:

1) Go to **<Maintenance>**
2) insert language disk
3) `Enter selection:` type **2** to select **Install**
4) `Enter selection:` type **7** to select **Languages**
5) `Enter selection:` type **1** to select **CopyLanguages.**
   All Language files will be loaded.
6) `Enter selection:` type **4** to select **FloppyEject** and remove the floppy.
7) Exit **<Maintenance>**
8) Reset the UI to activate the selected language.
   ✦ The language is set in the adc.cpf file.

2.4. Finish upgrade

To finish the upgrade a customer specific backup has to be made on an empty floppy.

1) Go to **<Maintenance>**
2) Insert an empty floppy disk
3) `Enter selection:` type **2** to select **Install**
4) `Enter selection:` type **9** to select **Backup**
5) `Enter selection:` type **1** to select **SiteSpecific**
6) `Save Area backup on floppy or tape [floppy,tape,?,q]:`
   type **f** for `floppy`
7) After the backup is finished select **q** to quit.
8) Select **q** again
9) `Enter selection:` type **4** to select **Tools**
10) `Enter selection:` type **8** to select **EjectFloppy** and remove floppy from floppy drive
11) Select **q** to quit Tools menu
12) Exit **<Maintenance>**
13) Label floppy with backup with the following data and store it in a save place:

SaveArea backup of <*hostname*>	
For Version:	DIPS1005
Name:	<*Your Name*>
Date:	<*Current date*>

3. Solved Problems with DIPS1.0.05

- UI: does not show all images

  With the last SW version the file size of the images has been reduced, so it is possible to store more images on HD. But the algorithm to calculate the maximum number of images was working in the same way, the no. of max. images was always too low. With this SW version the calculation works with the correct image file size.

- UI: Browser not updated after long non activity
  When a user interface module is left alone for a long time without receiving any updates, it seems that it get starved by the OS. Now an update event is send at least every 15 minutes.
- UI: Status flag "printed", "archive" and "send" are set now with fast channel job as well.
- UI: <SEND> and <ARCHIVE> button removed, if no SCP destination is configured.
- UI: Crash on zoom of some HR images (21cm x 43cm) solved
- Annotation: thumbnails images are no more corrupted when annotation was applied.
- Annotation: no more complete "White images" if zoom has been applied on annotated images.
- Annotation: crash when an image will collimate with following conditions solved
  – annotate an image – undo the annotation – collimate the image manually
- Annotation: Problem with grid in inch solved
  The routine did not make the required conversion for inches
- Annotation: if the measurement calibration function of the annotation package is used without a value filled in, all subsequent measurements for that image will be “0”
- Black boarder: black borders on thumbnails images now displayed when license is switched on.
- Dose Monitoring: if the user entered the value manually, the system sets <A> (means average of 50 images) in the status column instead <F> (fixed value). solved
- Truesize layouts *11"x14"–2/0–Portrait* and *14"x17"–2/0–Landscape* , removed from list in DIPS1.0.03, now available again.
- "Auto Reboot" of the (V)DIPS, done every Monday morning, removed
- "Auto Reset of the UI" of the (V)DIPS, done every day, removed.
- Performing physician replaces Reading physician solved
- Patient names and Patient first names, which contains more than one "space" in sequence, received by (V)DIPS without problems.
  Before images with such names have been refused by the workstation.
  Now white spaces in patient name and patient first name are not compressed any more.
- 2000 year problem in id_date solved
  Years beginning with "8" or "9" gets a "19" prefix, other years gets a "20" prefix.
- DICOM: if an image has been reprocessed on the (V)DIPS, the image gets now an altered Image_UID no. for sending to IMPAX.
- IMPAX: Measuring on IMPAX 3,5 or higher correct now.
  Image pixel spacing is sent correctly now (DICOM element 28,30). The parameter is now sent in pixel / mm instead of pixel / cm.
- Loading "cpf" crashes when local menus are stored - solved
- Info counter: sometimes info counter could not be read - solved

4. What's new in DIPS1.0.05

- ⚠ (Warning sign) on hardcopy identifies manual reprocessed images.
  Positions of the sign at the film: in text field in the upper left corner and in the image on the lower right corner.
- UI: Symbol 1:1 to the true size print button added
- UI: "Destination name" on the top of the Browser GUI added
  This name is defined in the adc.cpf-file in the field <station name>
- UI: in System monitoring module "Info button" for the following Network information added
  –processing station name, Hostname, IP address, DICOM AE title and DICOM Port no.
- UI: in System monitoring module – Printer Output: Function "Print test images" added
- UI: in System monitoring module Input and output lists enlarged
- More detailed information for WARNING MESSAGES, received from DICOM output. However as this messages are a part of DICOM, they always will be in English and not in the national language.
- Annotation: font sizes increased
- Link option: is no more a licensed product; therefore the Link option is removed from the license manager and is a part of the basic software.
- Truesize printing: for DRYSTAR, LR3300, LR5200 added
- Truesize printing: 10"x12" images can now be printed on a film 14" x 17" in portrait.
- InitModem data file adapted
- SOLARIS 2.6 on MIMOSA CD. This supports ULTRA SPARC 1 and ULTRA 10.
  Note: ULTRA 10 (PCI BUS based) works only with SOLARIS 2,6 or higher.
- Support for all sizes of SCSI disks, formatted in BSD format e.g. SUN HD
- Images in waste bin are deleted before an upgrade
- Log file: information about manual deleted images added
- Statistic counters enhanced (Input – Output counters, destination counters)

5. Functions, which will be implemented and supported in one of the next software versions

- Leeds phantoms (option)
- Patient Overview (option)
- Slide (option)
- Full Leg/Spine (option)
- Pediatric and Dental software (option)
- PRID application on UNIX System
- DICOM worklist

6. Known bugs not solved yet (DIPS 1.0.05)

- UI: is closed when background was reset.
- UI: Date always in US format (month/day/year), independent from national language setting.
- UI: Problem with Status flag “send”, “printed” and “archive”: “send” flag not reset to “not send” if transmission failed.

  Workaround: Reset UI, then flags are updated.
- Screen lock / screen saver cannot be switched off via the adc.cpf / CCM tool.

  Workaround:

  - for DIPS1.0.03 no workaround
  - for DIPS1.0.05 the following steps have be performed:

  1) Press <OPEN> button on the keyboard to get into UNIX
  2) Select Style Manager (Button TTT) from the toolbar at the bottom of the screen
  3) Select <Screen> in the Style Manager
  4) Switch Screen Lock to <OFF> and press <OK>
  5) Select <Startup> in the Style Manager
  6) Select <Set Home Session ...> and confirm with <OK>
  7) Select <OK> again to leave the Startup settings
  8) Close <Style Manager>
- Annotation: no annotation can be created on zoomed images with ULTRA 10.
- Annotation: Problems with grid, if no value for the grid size is entered (starts an endless loop of calculation)
- Annotation: black and white dotted annotations, if the background is noisy.
- Annotation: some annotations are not inverted after inversion of the image.
- MIMOSA Maintenance: Upgrade procedure crashes.
- MIMOSA Maintenance: Changing the default router form the Maintenance does not work.

  Workaround: manual editing the file /etc/defaultrouter
- “Autodelete” function:
  - if the system runs with a very high troughput, the “Autodelete” can crash.

    Workaround: restart Background
  - performance decreases if image partitions are nearly full

    Before an image will be deleted by the “Auto delete function”, the image with the oldest creation date has be determined. Depending from the no. of image partitions this can take a lot of time. It can slow down the (V)DIPS considerably.

    Workaround: Reduce the no. of image partitions temporary till new SW is available. Delete images manually.